CLINICAL OBSERVATIONS

ON

THE SYPHILITIC LESIONS OF THE BONES OF THE HANDS IN YOUNG CHILDREN.

Dont strip this cover

BY

R. W. TAYLOR, M.D.,

SURGEON TO THE NEW YORK DISPENSARY, DEPARTMENT OF VENEREAL AND SKIN DISEASES.

Presented by A. E. M. Purdy

REPRINTED FROM

Dr. Brown-Sequard's Archives of Scientific and Practical Medicine.

April, 1873.

J. B. LIPPINCOTT & CO.,

25 BOND STREET, NEW YORK,

AND

715 & 717 MARKET STREET, PHILADELPHIA.

VIII.

CLINICAL OBSERVATIONS

ON

THE SYPHILITIC LESIONS OF THE BONES OF THE HANDS IN YOUNG CHILDREN.

BY

R. W. TAYLOR, M.D.,

SURGEON TO THE NEW YORK DISPENSARY, DEPARTMENT OF VENEREAL AND SKIN DISEASES.

AMONG the many lesions of hereditary syphilis, there are certainly none possessing greater interest than those of the bones. The careful study of these lesions, whenever they occur, is extremely important, as at the present time we do not possess a clearly-written and systematic history of their evolution, course, and peculiar features. As a consequence of this want, which is noticeable both in works on syphilis and in treatises on diseases of children and on surgery, there are undoubtedly cases of syphilitic osseous lesion which are wrongly attributed to rickets or struma, and, as such, not treated properly and with as much success as if their diagnosis had been intelligently made. Besides this drawback in the way of treatment, this ignorance of the nature of these lesions tends to confirm and perpetuate the opinion, which now largely prevails, that lesions of the bones in hereditary syphilis are extremely rare. This opinion, which is entertained by several eminent authorities, has, within a year or two, been proved to be too broadly stated; for observations by other reliable authors have conclusively shown that, although not common, these lesions are certainly not of very great rarity. It is my intention in this paper simply to record two cases as showing the clinical features of these lesions as they occur in the bones of the hands, and I shall reserve for a future occasion the general considerations of the course in the various other bones of the body. Of the two cases, whose history I now present, one is the result of hereditary, and the other of acquired syphilis; but

I have described them together in this paper for the reason that there is, I think, a similarity to be observed in the mode of evolution, course, and decline between the lesions of the bones produced by hereditary and those due to acquired syphilis in young children. The recorded cases of these lesions of the bones of the hands are, as yet, not very numerous. In a previous paper on Dactylitis Syphilitica in *The American Journal of Syphilography and Dermatology*, issue of January, 1871, I gave the outlines of a case reported by M. Archambault, which at the time I regarded as unique, as it certainly was then the only recorded case; but I have since read in the work of Baumé * the record of a case of hereditary syphilis, in which there were enlargements of the phalanges of the fingers and toes, though the author does not lay any stress on their occurrence. Since the publication of my article, interesting cases have been reported by Drs. Smith, Morgan, and Parry, and lastly, Dr. S. D. Gross, † of Philadelphia, reports a case of enlargement of the metacarpal bone of the thumb, following an injury received a year previously, which he considers to be dactylitis syphilitica. I think that there are several points in this case which render its syphilitic origin very dubious. First, it is a lesion of traumatism, and does not come on as dactylitis does; but Dr. G. thinks it could not have developed but for a syphilitic taint! Second: neither of the parents are proved to be, in any manner, syphilitic, and the only reason

* Précis théor. et pratique des mal. vener. Partie première, pp. 178, Lyon, 1840.

† In a very admirable clinical lecture on hereditary syphilis, by Dr. J. S. Parry, of Philadelphia, I find this statement: "From what I have said you have been led to infer that dactylitis syphilitica is a rare affection. This is the opinion of Dr. Taylor. But I may say that my colleague, Dr. Maury, tells me that it is his opinion that Taylor has exaggerated its rarity. Dr. Maury tell me he has seen a large number of these cases, both among persons having acquired and those having congenital syphilis." I have no desire whatever to exaggerate the rarity of a trouble of which to-day we have less than twelve *recorded* cases; and I also would say that it is my humble opinion that Dr. Maury is not in a position to make such a strong assertion, simply from the *remembrance* of cases which he thinks are those of dactylitis syphilitica. If at some future time he should publish these *numerous cases*, and they should be accepted as undoubtedly syphilitic in their origin, I shall be prepared to modify my opinion as follows: That elsewhere dactylitis syphilitica is, according to universal testimony, a rather rare affection; but that in Philadelphia, in Dr. Maury's practice, it is very common. Dr. Wigglesworth, of Boston, and I were once shown a case of plantar abscess, with inflammatory enlargement of the great toe, by a person who called it dactylitis syphilitica, who also favored us with the information that he had seen five other cases of that affection!

Dr. Gross, in his *Surgery*, published in 1872, says he thinks the affection is common, for the reason that he says he sees cases every winter at his clinic. The following facts, I think, will fully settle this point. At the date of publication of my article, January, 1871, not a single case had been reported by an American or English author. Not a singe work on surgery mentioned it, not even excepting the edition of Dr. Gross's own *Surgery*, which was then before the public. He, however, included a description of it in his 1872 edition. But two text-books on syphilis merely mention it, and many classical works on syphilis have no account of it whatever. Many surgeons of great experience in New York personally told me they had never seen a case. Dr. Bumstead, with his large experience, had seen but one case, and Sir James Paget, in a letter of acknowledgment to me for my article, informed me he had seen one case; finally, of the form of dactylitis which occurs in children, which Dr. Gross now says is sufficiently common, there was but a single case on record; namely, that of Archambault. These being the facts, can this lesion be called *common?*

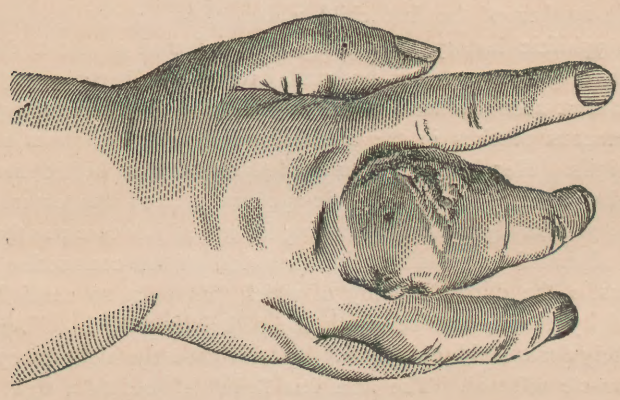
for suspicion of syphilis is in the fact that the mother has had three dead children and several miscarriages, which might have resulted from a simple uterine disease, and that the father is not perfectly healthy. Finally, there is an entire absence of any good reason for suspecting syphilis, as the child was not described as presenting the faintest evidence of syphilis other than that a metacarpal bone was swollen, and that these bones are sometimes swollen in syphilitic children, but certainly not in the manner described in this case.

There being, then, less than half a dozen *recorded* authentic cases of this lesion on record, that by Dr. T. Curtis Smith (*American Journal of Syphilography and Dermatology*, Jan., 1872) being one most satisfactory in its history of any published, I think this case will prove interesting, as it was observed by me during its whole course.

The mother of the first child whose case I report presented a clear syphilitic history, she having been infected at about the fifth month of pregnancy, her husband having then become syphilitic. When first seen by me she had a general scaling papular syphilide and mucous patches in the mouth, and showed evidences of a recent iritis. Her health was much less robust than before marriage, and she presented a very anæmic appearance, and was tortured with severe pain at night. An interesting feature of her case was the presence of that form of diffuse inflammation of the connective tissue of muscle the clinical history of which has been so carefully portrayed by Notta, and of which the pathology was, I believe, first minutely described by Virchow. In this case the right biceps was the muscle affected. The arm was flexed almost to a right angle and extension was impossible, even if force was used. The muscle presented a firm sensation and was diminished in size. She came under my observation on the first of June, 1871, having been sent to me by my friend Dr. W. H. Draper. As far as I could ascertain, the father was within the first year of his secondary period: consequently, the virus was as yet active in his system. The child's history is as follows:

Matilda C. came under my observation June 1st, 1871, she being then six months old. At birth she presented no lesions of the skin and was seemingly a well-developed child; but when a month old she was afflicted with a roseola, mucous patches, and snuffles, all of which disappeared and were replaced by a general papular syphilide. When the child was six weeks old, its mother noticed that its right middle finger was somewhat enlarged, but she could not obtain any evidences of pain. The enlargement slowly increased for two months, when the skin covering the first phalanx became slightly red and thickened and tender, and very tense from the pressure within. This inflammation of the integument and enlargement

of the bone progressed very slowly; and at the end of ten weeks, which would be the fourth and a half month of the existence of the trouble, fluctuation was discovered and an incision was made by a surgeon on each side of the finger, with the result of liberating a considerable quantity of pus. At this time the patient came under my care. The right hand presented the appearance shown in the illustration, which is taken from a cast made from life. The middle finger was greatly swollen, being fully an inch in all diameters and having a circumference of two and three-quarter inches. The finger was very markedly flexed and could not be fully extended, a fact which was due to the tension produced by the swelling of the bone on the flexor tendon. This condition, which I have also observed in two other similar cases, continues as long as the swelling is great and consequently disappears very slowly. The fore and ring fingers were very much separated, and were rendered unwieldy by their abnormal position. This was very noticeable when the child clasped any small article between the thumb and fore-finger. The ulcers which resulted from the incisions had a sloughy base similar to that observed in ulcerating gummata, were surrounded by a livid, undermined edge, and they secreted



considerable quantities of sanious pus. There was no evidence, nor had there been, of spontaneous pain, but the finger was sensitive to handling as evidenced by the distressed look of the child's face. According to the mother's statement, the child nursed and slept well, and its strength was not impaired.

I immediately placed the mother on half-grain doses of the protoiodide of mercury twice a day, with 5 grains of the citrate of iron and quinine before each meal. Her mucous patches were treated locally, and I applied faradization to the contracted arm.

For the child I ordered a grain of the hydrargyrum cum creta three times a day; and after slightly pencilling the surface of the ulcers with nitrate of silver I ordered an ointment composed of ung. hydrarg., 2 drachms; ung. simpl., 6 drachms. During the month of June very little change took place in the finger, which was fully as large as ever, but the cutaneous and mucous lesions had disappeared.

At the end of July it was noticed that the ulcers discharged less, that their edges were less everted, and that there was a diminution in the circumference of the phalanx of one-quarter of an inch.

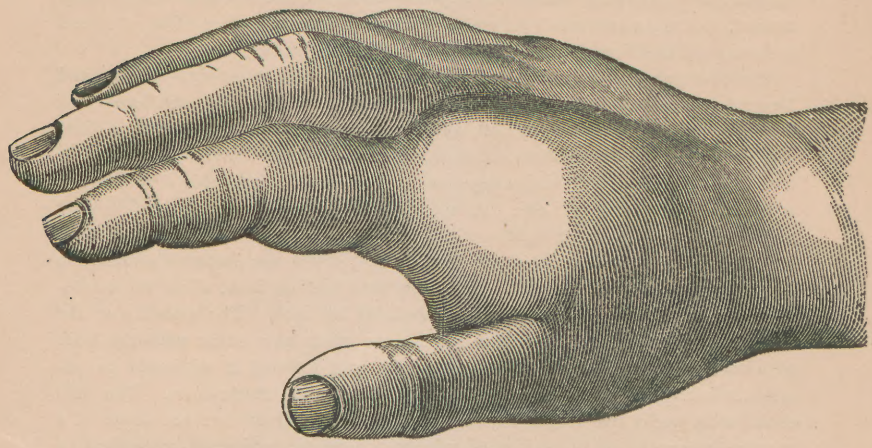
During the month of August there was also an improvement, and the finger was an eighth of an inch less in circumference, and during this month the child had not taken the powders more than ten days, in consequence of gastro-intestinal disorder. At this time the mother was greatly improved in health, her strength being nearly normal, having no mucous or cutaneous lesions, and she was able to flex or extend the arm, and the biceps muscle was as large as its fellow.

The case progressed favorably during the months of September, October, and November, for during this period the bone became markedly less swollen. The ulcers, however, did not wholly heal, and required stimulation about once a fortnight, as exuberant granulations appeared on their floor. Early in January the ulcers had fully healed, leaving a depressed, thin cicatrix on each side of the finger, which was adherent to the bone. At this time the finger presented the following appearance: It was three-eighths of an inch longer than its fellow of the other hand, owing to an elongation of the first phalanx, which was flattened laterally, so that its transverse diameter was a little less than half an inch, while its antero-posterior diameter was about three-quarters of an inch. The mobility of the finger seemed perfect, and the child was able to grasp any article with the hand with normal power. In the treatment of the case I found it advisable to administer during the last five months a mixed treatment in minute doses. The child took for six weeks five drops, and after that to the period of cure ten drops of a mixture composed of bichloride of mercury, 1 grain; iodide of potassium, 4 drachms, mixed with 4 ounces of syrup. In these cases of syphilitic bone lesion in children, I have found a combination treatment to be more efficient than a simple treatment. I should add that there were periods varying between a few days and a week that the mother failed to give the remedy; but, considering the length of time of treatment, she was upon the whole faithful in her duty. There was also a similar lesion of a metatarsal bone, which was cured at the same time.

This case is interesting, not only as presenting peculiar osseous lesions, but also as demonstrating their curability. Though the affection lasted a long time, a cure was obtained, while two physicians had urged removal of the finger and pronounced its cure hopeless. It certainly demonstrates the necessity of careful examination in cases of lesions of the bones in children.

The second case was that of a child four years and four months old. Her father, a policeman, became syphilitic, and infected his wife, who was delivered of a syphilitic child, in whom were developed osseous lesions, and who was a victim to persistent mucous patches. The history of her case I reserve for another paper. Lorette C. was brought to me by her mother, whom I had treated some time before, on the 7th of June, 1871. She then presented a papular syphilide upon the cheeks and forehead, a declining roseola on the body, mucous patches in the mouth, and condylomata lata around arms. The child had suffered severely for a month with what the parents supposed to be rheumatism. Her sufferings were most severe at night, when she slept very little. The painful points were the lower end of the right radius and the upper part of left ulna, and in the metacarpal bone of the index finger of the right hand. At this time the parents suspected that syphilis was the cause of the child's suffering, as the father had been similarly afflicted, and this caused them to bring the child to my office. Upon examination at the time I found the metacarpal just mentioned to be

greatly enlarged and presenting to the feel a perfectly oval form. It was about an inch and a quarter in diameter at its middle, and then shaded off gradually on each end. It completely filled up the triangular space which exists normally between



it and the metacarpal bone of the thumb, and its enlargement was also visible upon the palmar surface of the hand. It was painful to manipulation, but there was no lesion of the skin, though this structure was stretched considerably over it. The appearance of the hand is shown in the illustration, which is taken from a cast made at the time. I ordered this child to take fifteen drops of mixture, containing the bichloride and iodide, similar to that which I prescribed for the first case, and at the end of a week the child did not suffer any pain. On the 8th of July the swelling had gone down to nearly three-quarters of an inch, and it gradually subsided until early in September, when it was no longer noticeable, and there was no difference to be appreciated by the touch between it and its fellow of the other hand. In July I increased the dose to twenty drops. In this case the remedy was taken faithfully. This child was infected with syphilis from the mucous patches of its baby sister, whom it kissed. About a month before it came to me its father noticed an ulcer on its lower lip, which he touched with nitrate of silver. This ulcer was not healed when I first saw the case, and the submaxillary glands were much enlarged.

ARCHIVES

OF

Scientific and Practical Medicine.

This Journal, edited by Dr. BROWN-SEQUARD, with the assistance of Dr. E. C. SEGUIN, and of several New York, Boston, Philadelphia, and Cincinnati Physicians and Surgeons—will appear on the 15th of every month, in numbers of about one hundred pages, similar to the first one.

This periodical will chiefly contain original papers on subjects belonging to every branch of the medical sciences. It will also contain: 1. An *Exposé* of the State of our Knowledge on some great Medical Question; 2. Translations of Short Foreign Papers; 3. Report on the Results of Experimental Researches made in Dr. BROWN-SEQUARD'S Laboratory by himself, by his assistant, MR. DUPUY, or by his pupils; 4. Reviews and Bibliographical Notices; 5. Reports on the Progress of Medicine, Surgery, and Obstetrics; 6. Miscellany.

Most of the numbers will contain illustrations or plates.

Books for review, and exchanges, should be addressed to Dr. C. E. BROWN-SEQUARD, No. 18 East 29th St., New York City. Communications intended for publication in the Journal must be addressed to Dr. E. C. SEGUIN, Sub-Editor, No. 37 East 12th Street, New York City.

Subscriptions received by Messrs. J. B. LIPPINCOTT & Co., No. 25 Bond Street, New York City, or No. 715 and 717 Market Street, Philadelphia.

The annual subscription price will be Four Dollars, to be paid in full, in advance. It is designed soon to confine the circulation to yearly subscribers only; the first numbers, however, will be sold separately at forty cents a copy.

Papers by the Editor, on the following subjects, will appear in rapid succession:

On Asphyxia, Syncope, and Collapse.
Ear Affections, and their Relations with Brain Disease.
Mechanism of Production of Symptoms in Diseases of the Brain.
Morbid Influences of the Nervous System on Organic Functions.
Physiological and Pathological Proofs of Attraction of Blood by Tissues.
Amaurosis and Deafness in Diseases of the Brain.
Rational Treatment of Poisoning by Organic Substances.
On the Various Kinds of Hemiplegia.
On Counter-Irritation: Its Importance and Rational Use.
Physiology and Pathology of Epileptiform Affections.
On Pneumonia and other Lung Affections in Diseases of the Brain.
On Reflex Paralysis and other Affections produced by a Reflex Influence.
Analogies and Differences between several Remedies (Belladonna, Digitalis, the Ergot of Rye, and the various Bromides).
Artificial Epilepsy in Animals, and what it Teaches for the Treatment of Epilepsy in Man.
On Transfusion of Blood: New Methods and Proper Conditions for its Use.
On Differences between Americans and Europeans, as regards Diseases and Power of Resisting Injuries.